

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
9 February 2006 (09.02.2006)

PCT

(10) International Publication Number
WO 2006/012975 A1

(51) International Patent Classification⁷: **B22D 41/18**,
41/16

(21) International Application Number:
PCT/EP2005/007470

(22) International Filing Date: 9 July 2005 (09.07.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
04017978.0 29 July 2004 (29.07.2004) EP

(71) Applicant (for all designated States except US): **RE-FRACTORY INTELLECTUAL PROPERTY GMBH & CO. KG** [AT/AT]; 11, Wienerbergstrasse, A-1100 Wien (AT).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **LEE, Stephen** [GB/GB]; 6 River View Crescent, Cardross G82 5 LT, Scotland (GB). **REITERER, Franz** [AT/AT]; 464 Kärntnerstrasse, A-8700 Leoben (AT). **JANKO, Wilhelm** [AT/AT]; 5 Naglergasse, A-8010 Graz (AT).

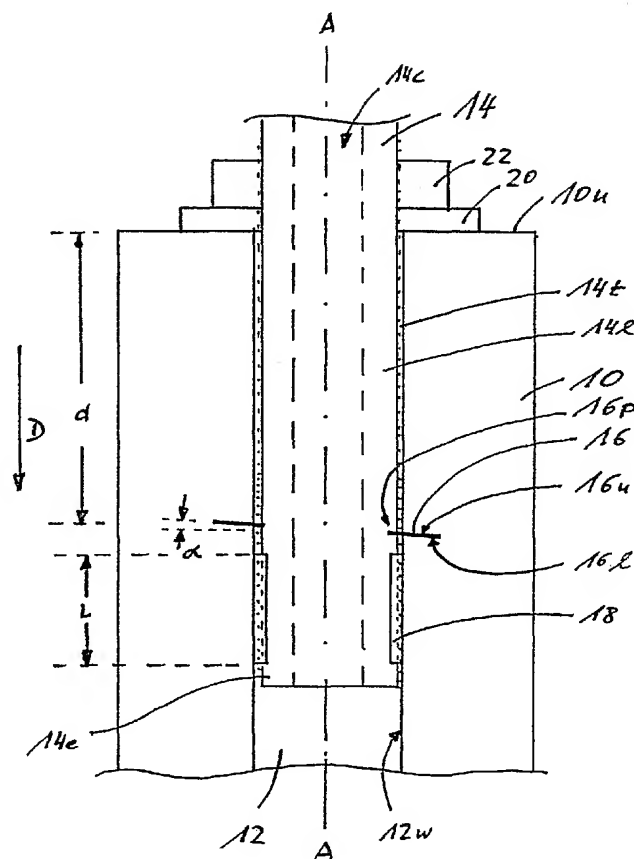
(74) Agents: **BECKER, Thomas, U.** et al.; Becker und Kollegen, 22 Turmstrasse, 40878 Ratingen (DE).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: AN ELONGATED STOPPER DEVICE



(57) Abstract: The invention relates to an elongated stopper device for flow control of molten metal, i.e., for controlling the flow of molten metal from a metallurgical vessel, such as a tundish.

WO 2006/012975 A1



Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.